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Bristol Bay Regional Seafood Development Assoc.
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June 20, 2010

Lisa P. Jackson, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Dennis J. McLerran, Regional Administrator
U.S. Environmental Protection Agency, Region 10
Regional Administrator's Office, RA-140
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Re: Request that EPA initiate proceedings under 404(c) of the Clean Water Act as it pertains to discharges from proposed mining activities in the Bristol Bay area of Alaska.

The Bristol Bay Regional Seafood Development Association is a non-profit association comprised of all 1,865 Bristol Bay driftnet fishermen. These fishermen contribute 1% of their revenues to support the purposes of the Association as defined in Alaska state law. These purposes include adding to fishing infrastructure, improving quality, research and marketing. We currently spend over $1 million annually on projects in each of these program areas.

The Bristol Bay salmon stocks are healthy. This is primarily due to a healthy environment and to management practices that assure ongoing abundance. Total wholesale value for salmon produced in 2008 (most recent data) was over $300 million. On average, more than half of the world's sockeye spawn and are harvested in the waters of Bristol Bay. The commercial fishery of Bristol Bay is now in its 127th continuous year and is currently estimated to provide roughly 75% of the area's employment.

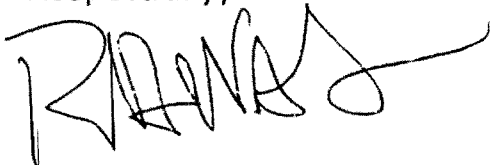
Our organization is dedicated to maintaining and improving this time-honored industry – even as salmon runs in other areas are in decline or have died. For the fishery to continue and prosper, the area's water and habitat must also be maintained.

Recent mining proposals threaten these various measures of abundance. Mining developers ask us to wait until permit applications are submitted before deciding on the mine. In our opinion, once permit applications are submitted, discussions will focus on how a mine should be built – not on whether this is the right place, whether existing durable businesses should be put at risk or whether this is the right type of development for local communities, the area's biological health or fishermen.

It appears to us that the 404(c) process offers an opportunity to look at the big picture question before getting to the "how" questions. Before discussing specifics such as how high the dams will be, for example – we should first look at the macro issue of whether mining is safe or appropriate in this particular area.

For these reasons, we ask that you please implement the procedures of section 404(c) of the Clean Water Act. To us they seem tailored to address just these types of questions in Bristol Bay, a truly one-of-a-kind area.

Respectfully,



Bob Waldrop
Executive Director

The Justification for Preemptive Use of CWA 404(c) to Protect Alaska's Bristol Bay Watershed

1. Introduction.

The proposed Pebble Mine in Bristol Bay, Alaska poses numerous significant and potentially long lasting threats to the environment and human health. Specifically, municipal water supplies, fish habitat (including spawning and breeding grounds), wildlife habitat and recreational areas are all threatened. Consequently, we request that the Environmental Protection Agency (EPA) use it's authority under CWA 404(c) to proactively withdraw lands in the Bristol Bay Watershed from future specification as disposal sites for dredge and fill materials associated with mining operations, including the proposed Pebble Mine. The EPA has the authority and an unprecedented opportunity to safeguard this unique and valuable habitat and the health of local people by exercising its Clean Water Act Section 404(c) "veto authority" to protect the wetlands and waters in the Kvichak and Nushagak drainages of the Bristol Bay watershed. The unique conditions of the Bristol Bay headwaters justify an immediate and precedential action by EPA to prohibit dredge and fill activity related to large-scale mining.

2. Bristol Bay: A Valuable and Unique Resource Under Threat.

The Bristol Bay area of Alaska is internationally renowned for it's remarkable fishery and wildlife values. These values are at risk of devastation from proposed mining operations in the headwaters of the watershed.

Bristol Bay: A globally significant fishery and watershed.

As salmon and their habitats continue to decline throughout much of their range, Bristol Bay stands as one of the last remaining strongholds of healthy salmon populations; providing a vital and perpetual resource not just to Alaskans, but to consumers throughout the U.S. and around the world. Where once similar areas existed, now vast sums of money are spent each year attempting to restore salmon runs in degraded habitats. We have learned, over and over, that protection is less costly and more certain than restoration. Indeed, many former strongholds of salmon will never be restored despite our efforts.

Mining Threats in the Bristol Bay Headwaters.

This remarkable area is currently threatened by several hardrock mining proposals - most notably, the Pebble Mine. The potential impact from this type of activity could be severe. It is estimated that the Pebble mine would produce between 2.5 and 9 billion tons of waste[1] containing elements, such as copper and other heavy metals, that would threaten municipal water supplies, several fishery areas (including spawning and breeding

[1] Northern Dynasty Minerals, Ltd. News Release, Pebble Budget Increased To US $70 Million For 2009 (Sept. 23 2009) at 2.

grounds for world renowned populations of salmon), wildlife health and recreation areas.[2] If this project moves forward, these toxins would have to be contained and potentially treated in perpetuity. Because the Pebble property straddles the Kvichak and Nushagak river drainages – two critically valuable resource areas - any release of this waste into the surface or groundwater has the potential to severely harm Bristol Bay's salmon and the livelihoods of the Alaska Natives, commercial fishermen, and the sport fishing business owners, all of whom depend on them for their economic support, subsistence hunting and fishing, and cultural well-being.

According to documents from 2006, Pebble Limited Partnership's (PLP's) plans call for the construction of colossal earthen dams over 700 feet high,[3] an 86 mile access road though sensitive fish habitat,[4] and a deep water port in Cook Inlet,[5] home of the endangered Cook Inlet beluga whale.[6] This development will take place in an area of high seismic activity.[7] The infrastructure that Pebble would require, including roads a power plant and a new port facility, will provide access and incentives for industrial development and increased population. In evaluating the adverse effect of a future discharge, EPA may consider the cumulative impact of past as well as future discharges.[8] In this instance, there is a high probability that power and road access could lead to additional mining development that would forever change and severlely diminish the habitat value of the Bristol Bay headwaters..

EPA has the authority to Act Now

Should the Pebble project proceed, it will require several permits for dredge and fill activities under Section 404 of the Clean Water Act.[9] While the Army Corps or an authorized State has the authority to issue a § 404 permit, Section 404(c) "authorizes EPA to prohibit, restrict, or deny the discharge of dredged or fill material at defined sites in waters of the United States (including wetlands) whenever it determines, after notice and opportunity for public hearing, that use of such sites for disposal would have an

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[2] Robert E. Moran, Ph.D., Michael-Moran Assoc., LLC, Pebble Mine: Hydrogeology and Geochemistry Issues (Sept. 2007), available at http://www.fish4thefuture.com/pdfs/Moran_Hydrogeology_Geochemistry_8_9_07.pdf at 6, 11, 21, 25.

[3] See Knight Piesbold Consulting, Northern Dynasty Mines, Inc., Tailings Impoundment A Initial Application Report (Sept. 5, 2006), available at http://dnr.alaska.gov/mlw/mining/largemine/pebble/2006/damaap.pdf at 14. The three largest dams would be 740, 710 and 700 feet high.

[4] See The Pebble Partnership, Road, Port and Power, available at http://www.pebblepartnership.com/pages/project-information/road-port-power.php.

[5] See The Pebble Partnership, Road, Port and Power, available at http://www.pebblepartnership.com/pages/project-information/road-port-power.php.

[6] Final Rule to List Cook Inlet Beluga Whale as Endangered: 73 FR 62919 (October 22, 2008).

[7] See Tailings Impoundment A Initial Application Report (Sept. 5 2006), available at http://dnr.alaska.gov/mlw/mining/largemine/pebble/2006/damaap.pdf at 5.

[8] See 44 FR 58076, 58077 (Oct. 9, 1979).

[9] Under Section 404 of the Clean Water Act, anyone who proposes an activity that will result in the discharge of dredged or fill material into the waters of the United States is required to obtain a permit – either from the U.S. Army Corps of Engineers (see CWA §404(a)) or from a State with an approved delegated program (see CWA § 404(h)) - authorizing the proposed discharge consistent Permits must be consistent with guidelines outlined in 40 CFR Part 230 ((404(b)(1) Guidelines).

unacceptable adverse impact on one or more of various resources, including fisheries, wildlife, municipal water supplies, or recreational areas."[10]

Guidance for identifying an "unacceptable adverse effect" is provided in regulation:

> Unacceptable adverse effects means impact on an aquatic or wetland ecosystem which is likely to result in significant degradation of municipal water supplies (including surface or ground water) or significant loss of or damage to fisheries, shellfishing or wildlife habitat or recreational areas. In evaluating the unacceptability of such impacts, consideration should be given to the relevant portions of the section 404(b)(1) Guidelines. (40 C.F.R. Part 230).[11]

Activities in the Bristol Bay area, such as contemplated as part of the Pebble Mine, will regrettably but clearly trigger "adverse effects" to several of the listed resources:

Municipal Water Supplies: Dredge and fill activity associated with Pebble Mine operations will pose a significant threat to municipal water supplies in the region. The Safe Drinking Water Act (SDWA) requires EPA to list unregulated contaminants which are known or anticipated to occur in public water systems and which may require a national drinking water regulation in the future. Molybdenum, one of the elements to be mined by the PLP, has been designated a contaminant and listed on EPA's SDWA "Contaminant Candidate List"[12] Because the drinking water comes from the local rivers and waterways, a 2003 World Health Organization Report paints a bleak picture for the quality of this resource: "Molybdenum in Drinking-water Background document for development of WHO Guidelines for Drinking-water Quality": "Levels of molybdenum in drinking-water do not usually exceed 10 µg/litre (11). However, in areas near molybdenum mining operations, the molybdenum concentration in finished water can be as high as 200 µg/litre. Tapwater concentrations as high as 580 µg/litre have been reported in Colorado (6)... 6. Chappell WR. Transport and biological effects of molybdenum in the environment." Mining activities such as those proposed at the Pebble mine will likely impact drinking water through leaching heavy metals and other contaminants from waste rock, tailings, and waste containment facilities.

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[10] 33 U.S.C. § 1344(d): "The [EPA Administrator] is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. Before making such determination, the Administrator shall consult with the Secretary. The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection."

[11] 40 C.F.R. § 231.2(e).

[12] See US EPA "Fact Sheet: Final Third Drinking Water Contaminant Candidate List (CCL 3)" issued September 2009 available at http://www.epa.gov/ogwdw000/ccl/pdfs/ccl3_docs/fs_cc3_final.pdf.

Fishery Areas (including spawning and breeding grounds): Essentially untouched by industrial development, the headwaters of Bristol Bay are widely recognized as one of the last remaining strongholds for healthy salmon populations in North America and the world. Its eight major river systems and associated lakes provide pristine spawning grounds for trophy rainbow trout and all five species of Pacific salmon, including the largest sockeye salmon runs on Earth, and a variety of other fish and wildlife species that depend on the nutrients from salmon, clean water, and undisturbed habitat. In addition to this ecological distinction, Bristol Bay's salmon runs are the economic engine behind the entire region. Native Alaskan communities rely on them, as they have for centuries, to support traditional subsistence ways of life. Jobs linked to the commercial fisheries account for 75 percent of the local employment and generate nearly $325 million annually. Bristol Bay salmon account for 40% of global sockeye consumption, providing a healthy and nutritious form of protein for millions of people.

These fisheries and the complex ecosystems relying on salmon have proven to be entirely self-sustaining because of good management by the Alaska Department of Fish and Game, the intrinsic qualities of the habitat, and the fact that the habitat has not been degraded. The proposed mining operations carry a substantial risk of permanent degradation to theses irreplaceable resources.

Wildlife Areas: The uplands of Bristol Bay are important habitat for caribou and moose, both of which are important to sport and subsistence hunters. The vast majority of moose over-wintering habitats in this area are on land located north of Iliamna Lake and west of the Nushagak-Mulchatna River corridors. These overwintering habitats are lands at or proximate to the claims, the proposed road to the claims, or lands that the Department of Natural Resources classifies as open for mining. Several million acres of caribou over-wintering habitats lie in the Kvichak and Nushagak river drainages including the main caribou calving grounds of the Mulchatna caribou herd (presently about 40,000 animals). The southernmost calving ground lies directly atop the Pebble claims.

Recreation Areas: Sport fishing in Bristol Bay generates $60 million annually; anglers looking for "once in a lifetime" experiences on rivers such as the Nushagak, Mulchatna, Koktuli and Kvichak support more than 800 full- and part-time jobs. Mining activity and increased development associated with mining will detrimentally impact these areas by direct impacts fish and habitat. Development will also negatively impact opportunities for sport fishing operations in the area by diminishing the quality of the fishing experience.[13]

In addition to these impacts, the proposed mining activities pose additional significant and potentially long lasting threats to water and air quality, subsistence harvest of fish and game for Alaskan Natives, and sustainable growth for the region. While PLP has not released an up-to-date project design, documents submitted to Alaska's Department of Natural Resources over the past several years reveal mining claims for over 150 square

[13] John Duffield et al., *Ecomonics of Wild Salmon Watersheds; Bristol Bay, Alaska.* 2007.

miles and plans for a mining and processing complex covering roughly 30 square miles.[14] It is clear that, in addition to the numerous threats of direct and long term impacts from depositing up to 9 billion tons of mine waste in the headwaters of Bristol Bay, the indirect impacts of this project could be equally substantial.

EPA may employ this 404(c) authority proactively, withdrawing specific areas from future designation as disposal sites, thereby precluding 404 permitting before the Corps has made a decision on a permit under review or even prior to a permit application.[15] In fact, in EPA's explanatory text for the final regulations it specifically addresses the advantages of using 404(c) before permits are filed, stating that:

> Such an approach will facilitate planning by developers and industry. It will eliminate frustrating situations in which someone spends time and money developing a project for an inappropriate site and learns at an advanced state that he must start over. In addition, advance prohibition will facilitate comprehensive rather than piecemeal protection of wetlands.[16]

The EPA does not need to wait to see the details of an application to determine that unacceptable impacts will result from mining operations in these areas. In crafting the 404(c) regulations, the EPA noted that - even in the absence of a permit application identifying specific discharge proposals - "there are instances where a site may be so sensitive and valuable that it is possible to say that *any* filling of more than X acres will have unacceptable adverse effects."[17]

We believe that this is one such instance: sufficient information exists to indicate the unique and valuable resources in this watershed support a proactive and permanent withdrawal of lands in the upper watershed from future dredge and fill activities associated with mining developments such as those contemplated by PLP.

We recognize that the EPA may need more information to come to its own conclusion, however, it is important to note that a proposed determination by the EPA does not represent a judgment that any particular dredge and fill activity will result in unacceptable adverse effects. Instead, a proposed determination simply indicates that the Regional Administrator believes the issue should be explored. Furthermore, proof of

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[14] See Northern Dynasty Mines Inc., Pebble Project Application for Water Right, North Fork Koktuli River (July 7, 2006), available at http://dnr.alaska.gov/mlw/mining/largemine/pebble/2006/swnfkorig.pdf at Exhibit A, pp. 1-33; see also Knight Piesbold Consulting, Northern Dynasty Mines, Inc., Tailings Impoundment A Initial Application Report (Sept. 5, 2006) Figures, available at http://dnr.alaska.gov/mlw/mining/largemine/pebble/2006/damafig.pdf at Figure 3.1.

[15] 40 C.F.R. § 231.1(a). Administrator may apply 404(c) with regard to "any existing or potential disposal site before a permit application has been submitted to or approved by the corps or a state." See also 44 FR 58076 (October 9, 1979): "section 404(c) authority may be exercised before a permit is applied for, while an application is pending, or after a permit has been issued." "EPA feels that the stuate clearly allows it to use 404(c) before an application is filled."

[16] 44 FR 58076 (October 9, 1979)

[17] Id at 58076.

adverse impacts is not required at the time of initiating the process; a concern that unacceptable adverse affects may result is sufficient.[18]

3. Conclusion

The EPA clearly does not use its authority under 404(c) in the absence of a compelling justification.[19] We believe, however, that such a justification exists in this case because the criteria for using 404(c) are clearly met. In particular, the Pebble Project will cause unacceptable adverse impacts to one or more of the resources -- fisheries, wildlife, municipal water supplies, and recreational areas -- found in the headwaters of Bristol Bay.

Other agencies and policy makers recognize the irreplaceable values of the Bristol Bay watershed and are lining up to ensure those values are protected from potentially harmful development. In announcing a recent decision to cancel lease sales for 2011 for oil drilling in the North Aleutian Basin (offshore of Bristol Bay), U.S. Interior Secretary Ken Salazar said that the Bristol Bay region is one place that is "simply too special to drill."[20] Even while moving forward with development in other areas, the Administration specifically sought to afford protections to the Bristol Bay area, with its world-class sockeye salmon runs and abundant wildlife, noting:

> We are moving forward with significant new oil and gas exploration in frontier areas, such as the Arctic Ocean and areas in the Atlantic...[a]nd we are protecting areas off our coasts, like Alaska's Bristol Bay, that are simply too special to drill. Bristol Bay has some of the world's richest fisheries, including one of the largest sockeye salmon runs in the world. People come from across the globe to see its bears, whales, seals, and bald eagles. It is a national treasure that we must protect.[21]

Secretary Salazar and the Obama administration recognized that oil and gas development in this area is simply not worth the risk; the same is true for mining operations in the headwaters. The fish and wildlife values in Bristol Bay, its size and setting, and the national significance of its resources are, in the words of Secretary Salazar and President Obama, "a national treasure that we must protect." The risk to this national treasure is too great and the resource too unique and irreplaceable to allow the Pebble Project to continue forward.

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[18] Newport Galleria Group v. Deland, 618 F. Supp. 1179, 1182 (D.D.C., 1985) ("[404(c) sets out the threshold requirements for the initiation of section 404(c) proceedings whatsoever; the sole specific limitation-the finding of an "unacceptable adverse effect"- applies only to actions the [Regional Administrator] may take after the notice and hearing process, not before."

[19] EPA has exercised this authority infrequently - in twelve instances with an additional two processes currently underway.

[20] Bluemin, Elizabeth, *Obama drilling policy excludes Bristol Bay*. Available at: http://www.adn.com/2010/03/31/1206793/bristol-bay-off-limits-arctic.html#ixzz0owo423Mo.

[21] Id.

The legislatively defined criteria for asserting CWA 404(c) authority exists in the unique conditions of Bristol Bay, justifying an immediate and precedential action by USEPA. **We urge EPA to proactively fulfill its mission to protect the environment and human health in Bristol Bay, AK by using its authority under CWA Section 404(c) to withdraw waters and wetlands in the headwaters of the Bristol Bay watershed from future specification as disposal sites for dredge and fill activity associated with mining operations.**

We are committed to working with USEPA as it moves forward in the Pebble Mine 404(c) process.